

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	136	mobility adj probe\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:00
L2	47	mobility adj (tag\$1 or tagged)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:01
L3	416	mobility adj modif\$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:01
L4	560	I1 or I2 or I3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:01
L5	141889	hybridis\$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:02
L6	325	I4 and I5	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:02
L7	39346	435/6[ccls]	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:02
L8	224	I6 and I7	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:02
L9	1174646	@rlad<"20021119"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:02

✓  
2/17/07

## EAST Search History

L10	134	I8 and I9	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:03
L11	30707	I5 and I7	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:03
L12	17135	I9 and I11	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:04
L13	134	I12 and mobility adj (probe\$ or tag\$1 or tagged or modif\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:04
L14	134	I12 and I13	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:04
L15	93303	ligat\$	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:05
L16	85	I14 and I15	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/02/17 16:05

2/17/07  
L

\*\*\*\*\* Welcome to STN International \*\*\*\*\*  
\*\*\*\*\*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 JAN 17 Pre-1988 INPI data added to MARPAT  
NEWS 4 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results  
NEWS 5 FEB 22 The IPC thesaurus added to additional patent databases on STN  
NEWS 6 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
NEWS 7 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 8 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
NEWS 9 MAR 22 EMBASE is now updated on a daily basis  
NEWS 10 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL  
NEWS 11 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL  
NEWS 12 APR 04 STN AnaVist \$500 visualization usage credit offered  
NEWS 13 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced  
NEWS 14 APR 12 Improved structure highlighting in FQHIT and QHIT display in MARPAT  
NEWS 15 APR 12 Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected  
NEWS 16 MAY 10 CA/Caplus enhanced with 1900-1906 U.S. patent records  
NEWS 17 MAY 11 KOREAPAT updates resume  
NEWS 18 MAY 19 Derwent World Patents Index to be reloaded and enhanced  
NEWS 19 MAY 30 IPC 8 Rolled-up Core codes added to CA/Caplus and USPATFULL/USPAT2  
NEWS 20 MAY 30 The F-Term thesaurus is now available in CA/Caplus  
NEWS 21 JUN 02 The first reclassification of IPC codes now complete in INPADOC

NEWS EXPRESS JUNE 16 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 23 MAY 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8  
NEWS X25 X.25 communication option no longer available after June 2006

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may

result in loss of user privileges and other penalties.

\*\*\*\*\* STN Columbus \*\*\*\*\*  
\*\*\*\*\*

FILE 'HOME' ENTERED AT 14:19:15 ON 17 JUN 2006

=> file caplus  
COST IN U.S. DOLLARS  
TOTAL  
FULL ESTIMATED COST  
SINCE FILE ENTRY SESSION  
0.21 0.21

FILE 'CAPLUS' ENTERED AT 14:19:29 ON 17 JUN 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 17 Jun 2006 VOL 144 ISS 26  
FILE LAST UPDATED: 16 Jun 2006 (20060616/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.  
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s (mobility (w)(tag? or modif?))/bi,ab 166265 MOBILITY/BI  
144183 MOBILITY/AB 56497 TAG?/BI  
47604 TAG?/AB 979055 MODIF?/BI  
839612 MODIF?/AB  
L1 65 (MOBILITY (W)(TAG? OR MODIF?))/BI,AB

=> s hybridi?/bi,ab 172558 HYBRIDI?/BI 147647  
HYBRIDI?/AB  
L2 172558 HYBRIDI?/BI,AB

=> s l1 and l2  
L3 10 L1 AND L2

=> d his  
(FILE 'HOME' ENTERED AT 14:19:15 ON 17 JUN 2006)  
FILE 'CAPLUS' ENTERED AT 14:19:29 ON 17 JUN 2006  
L1 65 S (MOBILITY (W)(TAG? OR MODIF?))/BI,AB  
L2 172558 S HYBRIDI?/BI,AB  
L3 10 S L1 AND L2

=> d l3 1-10 bib ab

L3 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:188958 CAPLUS

TI Mixed micelles as \*\*\*mobility\*\*\* \*\*\*tags\*\*\* in capillary zone electrophoresis for the sequence specific separation of DNA oligomers  
AU Grosser, Shane T.; Schneider, James W.  
CS Department of Chemical Engineering, Carnegie Mellon University, Pittsburgh, PA, 15219, USA  
SO Abstracts of Papers, 229th ACS National Meeting, San Diego, CA, United States, March 13-17, 2005 (2005), COLL-257  
Publisher: American Chemical Society, Washington, D. C. CODEN: 69GQMP  
DT Conference; Meeting Abstract  
LA English  
AB We present a method to label target DNA sequences with micellar surfactant microstructures to provide for sequence specific sepn. of oligomeric DNA in capillary zone electrophoresis. DNA \*\*\*hybridization\*\*\* is achieved using a peptide nucleic acid (PNA) appended to an aliph. tail to form a peptide nucleic acid amphiphile (PNAA). PNAA/DNA duplexes demonstrate tunable partitioning to ionic surfactant micelles which is dependent on the DNA oligomer length, aliph. chain length and choice of ionic surfactant system. Electrophoretic mobilities of PNAA in the presence of surfactant micelles have been investigated and a substantial mobility shift has been obsd. Although the mobility shift is greatest when using dialkyl aliph. tails, simply changing the aliph. tail length from 12 to 18 carbon units has a significant impact on the PNAA partitioning behavior. This effect makes possible the multiplexed sepn. of multiple DNA targets by matching PNA sequence to aliph. chain length in a PNAA.

L3 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2005:14601 CAPLUS  
DN 142:108378

TI Method for detection of nucleic acids by \*\*\*hybridization\*\*\* and ligation to primer extension products with mobility-dependent tags

IN Johnson, Martin D.; Hunkapiller, Michael W.  
PA Applera Corporation, USA  
SO PCT Int. Appl., 100 pp. CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1 PATENT NO. KIND DATE APPLICATION  
NO. DATE -----

PI WO 2005001129 A2 20050106 WO 2004-US15582  
20040604 WO 2005001129 A3 20050310 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2005239089 A1 20051027 US 2004-861314 20040604

PRAI US 2003-476434P P 20030606

AB The invention claims a method for detection of nucleic acids using mobility cassettes, which have different mobilities in mobility-dependent anal. techniques. A mobility cassette may comprise a first nucleic acid strand that is a \*\*\*mobility\*\*\* \*\*\*modifier\*\*\* and a second nucleic acid strand that contains a tag complement sequence that is complementary to the tag

sequence of the analyte nucleic acid. A portion of the second nucleic acid strand \*\*\*hybridizes\*\*\* to the first nucleic acid strand and at least a portion of the tag complement sequence does not \*\*\*hybridize\*\*\* to the first nucleic acid strand. When the second nucleic acid strand and the analyte nucleic acid are \*\*\*hybridized\*\*\* to each other, the first nucleic acid strand tag sequences can be ligated to the analyte tag sequences. Primer extension reactions may be used to generate primer extension products comprising the tag sequences. After at least one cycle of ligation, a \*\*\*mobility\*\*\* \*\*\*modifier\*\*\* ligation product may be detected, for example by capillary electrophoresis. The invention claims polyethylene oxide and polynucleotides as \*\*\*mobility\*\*\* \*\*\*modifiers\*\*\*. Methods of using mobility cassettes include adaptation of multiplex 5'-exonuclease (Taqman) reactions by post reaction \*\*\*mobility\*\*\* \*\*\*modification\*\*\* and adaptation of FEN endonuclease (Invader) allele-specific cleavage products for multiplex electrophoresis anal. The mobility cassettes can also be used to detect probes that \*\*\*hybridize\*\*\* to adjacent target nucleic acid sequences.

L3 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:414498 CAPLUS  
DN 140:401332

TI Detection of nucleic acid sequences by \*\*\*hybridization\*\*\* and cleavage of hybrids to release sequences labeled with electrophoretic \*\*\*mobility\*\*\* \*\*\*tags\*\*\*

IN Chenna, Ahmed; Singh, Sharat  
PA Aclara Biosciences, Inc., USA  
SO U.S. Pat. Appl. Publ., 124 pp., Cont.-in-part of U.S. Ser. No. 698,846. CODEN: USXXCO  
DT Patent  
LA English

FAN.CNT 32 PATENT NO. KIND DATE APPLICATION  
NO. DATE -----

PI US 2004096825 A1 20040520 US 2001-11201  
20011109 US 7037654 B2 20060502 US 6322980  
B1 20011127 US 1999-303029 19990430 US 6682887  
B1 20040127 US 2000-561579 20000428 US 6514700  
B1 20030204 US 2000-602586 20000621 US 6627400  
B1 20030930 US 2000-698846 20001027 WO  
2003042658 A2 20030522 WO 2002-US35893  
20021108 WO 2003042658 A3 20031204 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2005053939 A1 20050310 US 2004-494879 20040507  
PRAI US 1999-303029 A2 19990430 US 2000-561579  
A2 20000428 US 2000-602586 A2 20000621 US  
2000-684386 B2 20001004 US 2000-698846 A2  
20001027 US 2001-11201 A2 20011109 US 2001-337982P P 20011109 WO 2002-US35893 W 20021108

AB A method of simultaneously detecting a no. of different sequences within a sample using pairs of probes that form a duplex structure when \*\*\*hybridized\*\*\* to the target sequence in the correct orientation is described. One member of

the pair of probes is labeled with a tag that has a specific electrophoretic mobility. Cleavage of the duplex structures, e.g., with a restriction enzyme, releases electrophoretic tags that are then sepd. and identified to indicate the presence or quantity of the target sequences. The present invention is particularly useful in multiplex reactions wherein multiple target sequences are detected in one reaction. Kits useful in the detection of nucleic acids are also provided.

RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:293297 CAPLUS  
DN 140:316192

TI Detection of nucleic acid sequences by \*\*\*hybridization\*\*\* and cleavage of hybrids to release sequences labeled with electrophoretic \*\*\*mobility\*\*\* \*\*\*tags\*\*\*

IN Chenna, Ahmed; Xiao, Vivian; Singh, Sharat

PA USA

SO U.S. Pat. Appl. Publ., 45 pp., Cont.-in-part of U.S. Ser. No. 602,586. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 32 PATENT NO.	KIND	DATE	APPLICATION
NO. DATE			

PI US 2004067498	A1	20040408	US 2002-289309
20021106 US 6682887	B1	20040127	US 2000-561579
20000428 US 6514700	B1	20030204	US 2000-602586
20000621			

PRAI US 2000-561579	A2	20000428	US 2000-602586
A2 20000621 US 2001-337686P	P	20011109	US 1999-303029
A2 19990430			

AB A method of simultaneously detecting a no. of different sequences within a sample using pairs of probes that form a duplex structure when \*\*\*hybridized\*\*\* to the target sequence in the correct orientation is described. One member of the pair of probes is labeled with a tag that has a specific electrophoretic mobility. Cleavage of the duplex structures, e.g., with a restriction enzyme, releases electrophoretic tags that are then sepd. and identified to indicate the presence or quantity of the target sequences. The present invention is particularly useful in multiplex reactions wherein multiple target sequences are detected in one reaction. Kits useful in the detection of nucleic acids are also provided.

L3 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:397081 CAPLUS  
DN 138:397219

TI Detection of nucleic acid sequences by \*\*\*hybridization\*\*\* and cleavage of hybrids to release sequences labeled with affinity and electrophoretic \*\*\*mobility\*\*\* \*\*\*tags\*\*\*

IN Chenna, Ahmed; Singh, Sharat

PA Aclara Biosciences, Inc., USA

SO PCT Int. Appl., 200 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 32 PATENT NO.	KIND	DATE	APPLICATION
NO. DATE			

PI WO 2003042658	A2	20030522	WO 2002-US35893
20021108 WO 2003042658	A3	20031204	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	US 2004096825 A1
--	--	------------------

20040520 US 2001-11201	20011109 US 7037654
B2 20060502 US 2005053939	A1 20050310 US 2004-494879 20040507

PRAI US 2001-11201	A2 20011109	US 2001-337982P
P 20011109	US 1999-303029	A2 19990430 US 2000-561579
A2 20000428	US 2000-602586	A2 20000621 US 2000-684386
B2 20001004	US 2000-698846	A2 20001027
WO 2002-US35893	W 20021108	

OS MARPAT 138:397219

AB Probe sets for the simultaneous detection of multiple sequences in a complex nucleic acid sample are described. The method uses pairs of probes that will \*\*\*hybridize\*\*\* to one another to form a cleavable structure when their target sequences are in a defined relationship. Cleavage of the structure releases a sequence that includes a moiety that alters the electrophoretic mobility of the released sequence and a moiety that can be used as an affinity label for rapid enrichment of cleavage products. In a multiplexed assay, different released e-tag reporters may be sepd. and detected providing for target identification. The probes comprise interactive functionalities adjacent the cleaved portion positioned in the probes such that the interactive functionality does not form part of the e-tag reporters. Also described are biopolymers and nucleosides contg. such interactive functionalities.

L3 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:397080 CAPLUS  
DN 139:1969

TI Detection of nucleic acid sequences by \*\*\*hybridization\*\*\* and cleavage of hybrids to release sequences labeled with electrophoretic \*\*\*mobility\*\*\* \*\*\*tags\*\*\*

IN Chenna, Ahmed; Xiao, Vivian; Singh, Sharat

PA Aclara Biosciences Inc., USA

SO PCT Int. Appl., 81 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 32 PATENT NO.	KIND	DATE	APPLICATION
NO. DATE			

PI WO 2003042657	A2	20030522	WO 2002-US35552
20021106 WO 2003042657	A3	20041028	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	CA 2465588	AA 20030522	CA 2002-2465588
20021106 EP 1497455	A2	20050119	EP 2002-795593
20021106	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK	JP 2005511033	T2
20050428	JP 2003-544441	20021106	

PRAI US 2001-337686P P 20011109 WO 2002-US35552  
W 20021106

AB A method of simultaneously detecting a no. of different sequences within a sample using pairs of probes that form a duplex structure when \*\*\*hybridized\*\*\* to the target sequence in the correct orientation is described. One member of the pair of probes is labeled with a tag that has a specific electrophoretic mobility. Cleavage of the duplex structures, e.g. with a restriction enzyme, releases electrophoretic tags that are then sepd. and identified to indicate the presence or quantity of the target sequences. The present invention is particularly useful in multiplex reactions wherein multiple target sequences are detected in one reaction. Kits useful in the detection of nucleic acids are also provided.

L3 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:376266 CAPLUS  
DN 138:365125

TI Methods for detecting a plurality of analytes by chromatography

IN Chenna, Ahmed; Matray, Tracy J.; Hernandez, Vincent S.; Hooper, Herbert; Singh, Sharat

PA USA

SO U.S. Pat. Appl. Publ., 26 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT	32	PATENT NO.	KIND	DATE	APPLICATION NO.
NO.	DATE				

PI US 2003092012 A1 20030515 US 2001-10949  
20011109 WO 2003042398 A2 20030522 WO 2002-US35864  
20021108 WO 2003042398 A3 20030703  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2003235832 A1  
20031225 US 2002-290613 20021108 US 2005048553  
A1 20050303 US 2004-918876 20040816  
PRAI US 1999-303029 A2 19990430 US 2000-561579  
A2 20000428 US 2000-602586 A2 20000621 US 2000-698846  
A2 20001027 US 2001-10949 A  
20011109 US 2002-290613 A3 20021108

AB The invention provides a method for detecting a target nucleic acid sequence or other analyte such as protein, peptide, polysaccharide, lipid, or small mol. The method involves contacting one or more target nucleic acid sequences with a set of tagged probes under conditions sufficient for \*\*\*hybridization\*\*\* of a target nucleic acid sequence with a tagged probe, the tagged probes comprising a \*\*\*mobility\*\*\* \*\*\*modifier\*\*\* attached to a nucleic acid target binding moiety by a bond that is cleavable by a nuclease, the nucleic acid target binding moiety contg. at least one bond resistant to said nuclease; treating the tagged probe \*\*\*hybridized\*\*\* to the target nucleic acid with a nuclease under conditions sufficient for cleavage of the nuclease-cleavable bond to release a tag reporter; sepg. a tag reporter using a chromatog. method, and detecting a tag reporter corresponding to a known target sequence. The tagged probe may also comprise a \*\*\*mobility\*\*\* \*\*\*modifier\*\*\* attached to a target binding

moiety by a bond that is cleavable by visible light. A multiplexed sandwich immunoassay for six cytokines (IL-4, IL-6, IL-8, IL-10, TNF.alpha., and IFN.gamma.) was conducted using antibodies each tagged with a specific different light-cleavable carboxyfluorescein- derived tag (prepn. given) and second antibodies conjugated to a sensitizer. Released tags were sepd. using HPLC and detected using a fluorescence detector.

L3 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2002:814370 CAPLUS  
DN 137:334001

TI Polyalkylene oxide-modified oligonucleotides and their use in \*\*\*hybridization\*\*\*, amplification, and sequencing

IN Woo, Sam L.; Graham, Ron; Tian, Jing

PA PE Corporation (NY), USA

SO PCT Int. Appl., 93 pp. CODEN: PIXXD7

DT Patent

LA English

FAN.CNT	1	PATENT NO.	KIND	DATE	APPLICATION NO.
NO.	DATE				

PI WO 2002083954 A1 20021024 WO 2002-US11824  
20020415 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2002182602 A1 20021205 US  
2001-836704 20010416 US 6743905 B2 20040601  
CA 2443122 AA 20021024 CA 2002-2443122  
20020415 EP 1379698 A1 20040114 EP 2002-731376  
20020415 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP  
2004535382 T2 20041125 JP 2002-581694  
20020415 US 2005042644 A1 20050224 US 2004-856752 20040528

PRAI US 2001-836704 A 20010416 WO 2002-US11824  
W 20020415

OS MARPAT 137:334001

AB The present invention relates generally to nucleic acid functionalizing reagents, to \*\*\*mobility\*\*\* - \*\*\*modified\*\*\* sequence-specific nucleic acids, to compns. comprising a plurality of \*\*\*mobility\*\*\* - \*\*\*modified\*\*\* sequence-specific nucleic acids, and to the use of such nucleic acids and compns. in a variety of assays, such as, for example, for the detection of a plurality of selected nucleotide sequences within one or more target nucleic acids. The \*\*\*mobility\*\*\* - \*\*\*modifying\*\*\* reagents of the present invention comprise polyoxyalkylene phosphoramidites which can be joined to other \*\*\*mobility\*\*\* - \*\*\*modifying\*\*\* monomers and to sequence-specific nucleic acids via uncharged phosphate triester linkages. Addn. of the \*\*\*mobility\*\*\* - \*\*\*modifying\*\*\* phosphoramidite reagents of the present invention to oligonucleotides results in unexpectedly large effects on the mobility of those modified oligonucleotides, esp. upon capillary electrophoresis in non-sieving media. Thus, a 15-residue deoxyribo-oligonucleotide tagged on the 5'-terminus with fluorescein linked to HO(CH<sub>2</sub>CH<sub>2</sub>O)5P(=O)(OEt)O(CH<sub>2</sub>CH<sub>2</sub>O)5P(=O)(OEt)- and on the 3'-terminus with PEG 5000 was used in an invader assay to detect SNPs in the human tumor necrosis factor .alpha. gene.

2/17/07  
L

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR  
THIS RECORD ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L3 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2002:276209 CAPLUS  
DN 136:289912

TI Multiplexed differential displacement for nucleic acid  
determinations

IN Singh, Sharat; Inamdar, Anita; Ullman, Edwin F.; Cao,  
Liching; Albagli, David

PA Aclara Biosciences, Inc., USA

SO PCT Int. Appl., 43 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2 PATENT NO. KIND DATE APPLICATION  
NO. DATE -----

PI WO 2002029109 A2 20020411 WO 2001-US31326  
20011005 WO 2002029109 A3 20031120 W: AE, AG,  
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW RW: GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,  
KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,  
IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG US 2002045182 A1  
20020418 US 2001-929333 20010813 AU 2001096668  
A5 20020415 AU 2001-96668 20011005 US  
2003013117 A1 20030116 US 2002-245030  
20020916

PRAI US 2000-684590 A 20001005 US 1999-354629  
A2 19990716 US 2000-609279 A2 20000630 WO  
2001-US31326 W 20011005

AB Multiplexed detns. of large nos. of events are achieved in an  
accurate and simple manner by using a multitude of primer  
reagents in combination with different capture reagents that  
serve for sequestering all the reagents at a single site, followed  
by independent release of subsets of the primer reagents using  
differential release conditions. Also included as part of the primer  
reagents may be identifiers, which serve to identify a particular  
characteristic. The method is illustrated using primers with  
sequences for initiation of chain extension that are joined to or  
serve as a capture sequence, and where the extended primer has  
an identifier. After extending the primer, the extended primers  
are sequestered via the capture sequence onto a sequestering  
agent, sequentially released and the released extended primers  
analyzed to provide multiplexed detns. The subject method finds  
application for nucleic acid sequencing, single nucleotide  
polymorphism detns., identification of nucleic acid fragments, and  
the like.

L3 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2000:666919 CAPLUS  
DN 133:248032

TI Probe/ \*\*\*mobility\*\*\* \*\*\*modifier\*\*\* complexes for  
multiplex DNA sequence analysis

IN Grossman, Paul D.

PA The Perkin-Elmer Corporation, USA

SO PCT Int. Appl., 31 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1 PATENT NO. KIND DATE APPLICATION  
NO. DATE -----

PI WO 2000055368 A2 20000921 WO 2000-US6221  
20000310 WO 2000055368 A3 20010405 W: AE, AL,  
AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,  
TG CA 2365125 AA 20000921 CA 2000-2365125  
20000310 EP 1161563 A2 20011212 EP 2000-913853  
20000310 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU,  
NL, SE, MC, PT, IE, SI, LT, LV, FI, RO US 6395486  
B1 20020528 US 2000-522640 20000310 JP  
2002538839 T2 20021119 JP 2000-605784  
20000310 JP 3628614 B2 20050316 AU 775179  
B2 20040722 AU 2000-35218 20000310 US 6734296  
B1 20040511 US 2000-724730 20001128 US  
2005112594 A1 20050526 US 2004-769288  
20040129 AU 2004202467 A1 20040701 AU 2004-  
202467 20040603  
PRAI US 1999-124386P P 19990315 AU 2000-35218  
A3 20000310 US 2000-522640 A3 20000310 WO  
2000-US6221 W 20000310 US 2000-724730 A3  
20001128

AB The invention relates to compns. and methods for the anal.  
of multiple nucleic acid target sequences are disclosed. The  
compns. comprise a probe comprising a target-specific portion for  
sequence-specific \*\*\*hybridization\*\*\* to a target nucleic acid  
sequence, and a tag; and a \*\*\*mobility\*\*\* - \*\*\*modifier\*\*\*  
comprising a tail and a tag complement for binding to the tag.  
The assocd. methods generally comprise the steps of providing a  
sample potentially contg. one or more target nucleic acid  
sequences; providing one or more probes, each probe comprising  
a target-specific portion and a tag; providing one or more  
\*\*\*mobility\*\*\* \*\*\*modifiers\*\*\*, each \*\*\*mobility\*\*\*  
\*\*\*modifier\*\*\* comprising a tag complement and a tail;  
contacting the probe(s) and the target nucleic acid sequence(s)  
under conditions effective for sequence-dependent  
\*\*\*hybridization\*\*\* of the probe(s) and the target nucleic acid  
sequence(s); contacting the probe(s) and the \*\*\*mobility\*\*\* -  
\*\*\*modifier\*\*\* (s) under conditions suitable for selectively  
binding the probe(s) to the \*\*\*mobility\*\*\* \*\*\*modifier\*\*\*  
(s), thereby forming one or more probe/ \*\*\*mobility\*\*\*  
\*\*\*modifier\*\*\* complex(s); and analyzing the probe/  
\*\*\*mobility\*\*\* \*\*\*modifier\*\*\* complex(s) using a mobility-  
dependent anal. technique.

=> d his

(FILE 'HOME' ENTERED AT 14:19:15 ON 17 JUN 2006)

FILE 'CAPLUS' ENTERED AT 14:19:29 ON 17 JUN 2006

L1 65 S (MOBILITY (W)(TAG? OR MODIF?))/BI,AB

L2 172558 S HYBRIDI?/BI,AB

L3 10 S L1 AND L2

=> log y

COST IN U.S. DOLLARS

TOTAL

FULL ESTIMATED COST

SINCE FILE

ENTRY SESSION

43.92 44.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		SINCE
FILE	TOTAL	ENTRY
SESSION		
CA SUBSCRIBER PRICE	-7.50	-7.50

STN INTERNATIONAL LOGOFF AT 14:20:39 ON 17 JUN 2006

2/17/07  
2